

REMARKS

Election/Restrictions

Claims 21-57 have been withdrawn from consideration as being drawn to a non-elected species of the invention. The Applicant has chosen to maintain the withdrawn claims in the pending application for possible reinstatement upon the allowance of one or more generic base claims.

Double Patenting Rejection

Claims 1-20 have been rejected under the judicially created doctrine of obviousness-type double patenting over the claims of U.S. Patent No. 6,371,988. In response to the double-patenting rejection, the Applicant has filed a Terminal Disclaimer herewith, and therefore respectfully requests withdrawal of the double patenting rejection.

Claim Rejections – 35 USC §102 and 103

Claims 1-6, 10 and 17-20 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,609,635 to Michelson (hereafter “the ‘635 patent”). Additionally, claims 7-9 and 10-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over the ‘635 reference in view of U.S. Patent No. 5,366,875 to Wozney et al. (hereafter “the ‘875 patent”) and U.S. Patent No. 5,514,180 to Heggeness (hereafter “the ‘180 patent”). Further, claims 14 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over the ‘635 reference in view of U.S. Patent No. 4,703,108 to Silver et al. (hereafter “the ‘108 patent”).

It is well established that “an invention is anticipated if the same device, including all the claim limitations, is shown in a single prior art reference. Every element of the claimed invention must be literally present, arranged as in the claim.” Richardson v. Suzuki Motor Co. Ltd., 9 USPQ.2d 1913, 1920 (Fed. Cir. 1989).

Independent claim 1 recites an anterior wall having a convexly curved anterior surface, a posterior wall having a flat posterior surface, and two lateral walls integrally connected between the anterior and posterior walls to define a chamber, with the walls further defining a superior vertebral engaging face defining a first opening in communication with the

chamber, and an opposite vertebral engaging inferior face defining a second opening in communication with the chamber.

Notably, independent claim 1 specifically recites that the walls of the spinal spacer define the superior and inferior vertebral engaging faces, with the superior and inferior vertebral engaging faces of the walls defining first and second openings in communication with the inner chamber of the spacer. However, as shown in Figure 2 of the '635 patent, the openings 115 of the implant 100 extend through the upper and lower support surfaces 112, 114. Additionally, the '635 patent states that “[t]he upper and lower surfaces 112 and 114 have an interior surface which form a support structure for bearing against the endplates of the adjacent vertebrae between which the implant 100 is inserted.” (Column 6, lines 26-29). The plurality of openings 115 in turn pass through the upper and lower support surfaces 112, 114 and into the hollow chamber 116. The Applicant submits that the '635 patent fails to teach or suggest that the walls of the implant 100 define superior and inferior vertebral engaging faces, with the walls defining first and second openings in communication with the inner chamber of the spacer. Instead, the upper and lower support surfaces 112, 114 of the implant 100 each define a plurality of openings 115 in communication with the hollow chamber 116. However, the openings 115 are clearly not defined by the walls of the implant 100, as recited in independent claim 1.

Nevertheless, in order to further prosecution of the subject application, the Applicant has amended independent claim 1 to recite that the walls of the spinal spacer define “a superior vertebral engaging face defined by said walls, said superior vertebral engaging face defining a first opening extending between said walls, said first opening in communication with said chamber; and an opposite vertebral engaging inferior face defined by said walls, said opposite vertebral engaging inferior face defining a second opening extending between said walls, said second opening in communication with said chamber.”

The open spacer configuration recited in independent claim 1 is shown in Figures 1-3 of the subject application, with the walls 11, 15, 20 and 21 of the spacer 10 defining superior and inferior vertebral engaging faces 35, 40 which in turn define first and second openings 36, 41, and with the first and second openings 36, 41 extending between the walls 11, 15, 20 and 21 of the spacer 10. One advantage provided by the open spacer configuration recited in

independent claim 1 is the development of a contiguous/solid bone mass growth between the adjacent vertebra. (See page 3, lines 22-25 of the application). The open spacer configuration recited in independent claim 1 is clearly distinguishable from the implant configuration disclosed in the ‘635 patent which teaches providing a plurality of openings extending through upper and lower support surfaces 112, 114. Indeed, the openings 115 are not defined by the walls of the implant, nor do the openings 115 extend between the walls of the implant.

Accordingly, independent claim 1, as now amended, is submitted to be patentable over the ‘635 patent or any other reference of record, whether considered alone or in combination. Dependent claims 2-20 depend from amended independent claim 1 and are submitted to be patentable for at least the reasons supporting the patentability of independent base claim 1.

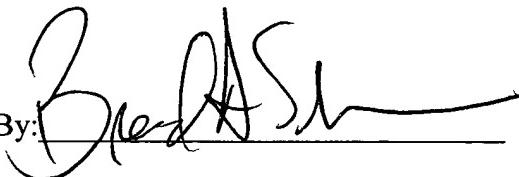
The Applicant has cancelled dependent claim 57 without prejudice for possible submission in a continuing application. Additionally, a new dependent claim 58 has been added which depends from independent claim 1. Dependent claim 58 recites that “said anterior and posterior walls are formed integral with said lateral walls to define a single piece spacer.” However, as shown in Figures 1 and 5 of the ‘635 patent, the posterior wall of the implant 100 comprises a slideable door 134 to provide a large opening for loading fusion promoting material into the inner fusion chamber. The slideable door 134 is not “formed integral with” the side walls of the implant, nor is the resulting implant 100 a “single piece implant”, as recited in dependent claim 58. Accordingly, dependent claim 58 is submitted to be patentable for reasons in addition to those set forth above with regard to the patentability of independent base claim 1.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the Applicant's application is now in condition for allowance with pending claims 1-20 and 58.

Reconsideration of the subject application is respectfully requested. Timely action towards a Notice of Allowability is hereby solicited. The Examiner is encouraged to contact the undersigned by telephone to resolve any outstanding matters concerning the subject application.

Respectfully submitted,

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